Docket No.

251811US2/ams

IN THE CONTED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Take

Takeshi NANJYO, et al.

SERIAL NO:

10/822,816

GAU:

FILED:

April 13, 2004

EXAMINER:

FOR:

OPTICAL DEFLECTION APPARATUS AND MANUFACTURING METHOD THEREOF, OPTICAL

DEFLECTION ARRAY, IMAGING APPARATUS, AND IMAGE PROJECTION DISPLAY APPARATUS

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(s) wish to disclose the following information.

REFERENCES

- The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.
- A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

RELATED CASES

- Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s), together with a copy of the claims and drawings of the pending application(s) is attached along with PTO 1449.
- ☐ A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

CERTIFICATION

- Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- □ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

DEPOSIT ACCOUNT

Please charge any additional fees for the papers being filed herewith and for which no check or credit card payment is enclosed herewith, or credit any overpayment to deposit account number <u>15-0030</u>. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

Marvin J. Spivak

Registration No. 24,913

Joseph A. Scafetta, Jr. Registration No. 26, 803

Customer Number 22850

Tel. (703) 413-3000 Fax. (703) 413-2220 (OSMMN 05/03) Docket No.

251811US2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF:

Takeshi NANJYO, et al.

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Respectfully submitted,

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AND IMAGE PROJECTION DISPLAY APPARATUS

STATEMENT OF RELEVANCY

References AL, AN, and AP through AY on Form PTO-1449 are discussed in the specification.

Reference AZ on Form PTO-1449:

This reference introduces the concepts of reference AX.

LIST OF RELATED CASES

9			
Docket Number	Serial or Patent Number	Filing or Issue Date	Inventor/ Applicant
PER CLIENT	6,467,881	10/22/02	KATOH
PER CLIENT	6,485,126	11/26/02	KATO et al.
PER CLIENT	6,367,914	04/09/02	OHTAKA et al.
PER CLIENT	6,312,108	11/06/01	KATO
PER CLIENT	6,332,669	12/25/01	KATO et al.
PER CLIENT	6,450,618	09/17/02	KATO et al.
PER CLIENT	6,150,698	11/21/00	OHTSUKA et al.
PER CLIENT	5,633,523	05/27/97	KATO
PER CLIENT	5,811,353	09/22/98	NANJO
PER CLIENT	5,668,413	09/16/97	NANJO
PER CLIENT	5,304,357	04/19/94	SATO et al.
PER CLIENT	5,108,843	04/28/92	OHTAKA et al.
0557-0915-0X FWC I#	08/006,147	01/19/93	HANG et al.
0557-0915-0X FWC#	07/630,779	12/21/90	UNKNOWN
0557-0915-0X [#]	07/234,672	08/22/88	UNKNOWN
0557-2105-2X	5,017,987	05/21/91	NANJOH et al.
0557-2968-2X FWC	5,448,113	09/05/95	SUZUKI et al.
0557-2968-2X [#]	08/027,985	03/08/93	UNKNOWN
0557-3044-2X	5,408,113	04/18/95	KANNO et al.
0557-4388-2	6,324,149	11/27/01	MIFUNE et al.

^{*}Present Application; listed for information
Abandoned Application

216209US2	6,636,368	10/21/03	OHTAKA
218290US2	10/050,865	01/18/02	OHTAKA et al.
230540US2	10/294,033	11/14/02	NANJYO et al.
237615US2 CONT	6,710,949	03/23/04	OHTAKA
238393US2	10/449,115	06/02/03	OHTAKA et al.
251811US2*	10/822,816	04/13/04	NANJYO et al.

^{*}Present Application; listed for information
Abandoned Application

Form PTO 1449	PATENT AND TRADEMARK OFFICE			ATTY DOCKET NO.		SERIAL NO.		
(Modified)				251811US2		10/822,816		
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				U.S. PATENT DOCUMENTS				
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE	
	AA	6,467,881	10/22/02	КАТОН				
	AB	6,485,126	11/26/02	KATO et al.				
	AC	6,367,914	04/09/02	OHTAKA et al.				
	AD	6,312,108	11/06/01	KATO				
	AE	6,332,669	12/25/01	KATO et al.				
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	AG	6,150,698	11/21/00	OHTSUKA et al.				
	АН	5,633,523	05/27/97	KATO				
	Al	5,811,353	09/22/98	NANJO				
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	АМ	5,017,987	05/21/91	NANJOH et al.				
	AN	5,448,113	09/05/95	SUZUKI et al.				
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		NUMBER	DATE	COUNTRY		YES NO_			
	AL	2941952	06/18/1999	JAPAN (with WO 96/41224)				X	
	AM	WO 96/41224	12/19/1996	WIPO					
	AN	3016871	12/24/1999	JAPAN (with corr. WO 96/41226)				×	
	AO	WO 96/41226	12/19/1996	WIPO					
	AP	6-138403	05/20/1994	JAPAN (with English Abstract)				×	
	AQ	2000-2842	01/07/2000	JAPAN (with English Abstract)				X	
	AR	2002-131838	05/09/2002	JAPAN (with English Abstract)				X	
	AS	5-2973	01/08/1993	JAPAN (with English Abstract)		<u> </u>		X	-
	AT	8-84485	03/26/1996	JAPAN (with English Abstract)				X	
				(Including Author, Title, Date, Pertinen					
	AU	K. E. PETERSEN, AP ARRAY FABRICATE	pplied Physics I D ON SILICON	etters, vol. 31, no. 8, pages 521-523, "M ", October 15, 1977	ICROMEC	CHANICAL	LIGHT M	ODULATO	OR
	O. SOLGAARD, et al., Optics Letters, vol. 17, no. 9, pages 688-690, "DEFORMABLE GRATING OPTICAL MODULATOR", May 1, 1992								
	L. J. HORNBECK, SPIE Critical Reviews Series, vol. 1150, pages 86-102, "DEFORMABLE-MIRROR SPATIAL LIGHT AW MODULATORS", 1989								
	P. F. VAN KESSEL, et al., Proceedings of the IEEE, vol. 86, no. 8, pages 1687-1704, "A MEMS-BASED PROJECTION AX DISPLAY", August 1998								
	D. S. DEWALD, Optical Engineering, vol. 39, no. 7, pages 1802-1807, "USING ZEMAX IMAGE ANALYSIS AND USER-DEFINED SURFACES FOR PROJECTION LENS DESIGN AND EVALUATION FOR DIGITAL LIGHT PROCESSING TM PROJECTION SYSTEMS", July 2000								
	AZ			285-289, "DIGITAL MICRO-MIRROR cepts of reference AX)	Ado	litional Refe	erences s	heet(s) at	tached
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